
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
Bernard W. Borschert, et al.) Group Art Unit 3722
Serial No. 10/738,469) Confirmation No. 8203
Filed: December 17, 2003) Examiner Michael Talbot
For: TWIST DRILL)) Attorney Docket K-2104

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Declaration Pursuant to 37 C.F.R. 1.132

I, Charles J. Petrosky, do hereby declare:

1. That I hold a Bachelor of Science degree in Industrial Engineering from Pennsylvania State University and a Master of Science degree in Industrial Engineering from Pennsylvania State University.
2. That I have been employed by Kennametal Inc. for the past twenty-six years (1981 to present). I was first employed by Kennametal Inc. as an Engineer in the Metalworking Technology Center for about nineteen years. For about the past six years I have been employed as a Staff Engineer responsible for designing holemaking products including drills. I am familiar with metalworking tooling and design including drills and other holemaking tools.
3. That I have reviewed U.S. Patent No. 6,261,034 to Cselle and U.S. Patent No. 5,704,740 to Ebenoch et al.
4. That I have reviewed the U.S. Patent Office Action dated November 03, 2005 in the above-identified patent application containing the following statement:

“Cselle ‘034 lacks the third helical portion having a twist in an opposite direction of the second helical portion. Ebenoch et al. ‘740 shows in Figure 2 a flute having three distinct portions (I, II, II) with the third portion (III) twisting in an opposite direction of the second portion (II) at a 0° helix angle (aligned with tool axis) and the second twisted portion capable of being subdivided into segments with a differing helical angle (col. 3, lines 26-35). In view of this teaching of Ebenoch et al. ‘740, it is considered to have been obvious to add a third portion twisting in an opposite direction of the second portion of Ebenoch et al. ‘740 to the twist drill of Cselle ‘034 to provide a much improved chip evacuation channel and a greater tool body stiffness to counter elastic bending deformation.”

5. That, in my considered opinion, neither "Cselle '034 or Ebenoch et al. '740 teaches or suggests a drill having three helical flute portions wherein the second portion twists in a direction opposite the first and the third portion twists in a direction opposite the second.

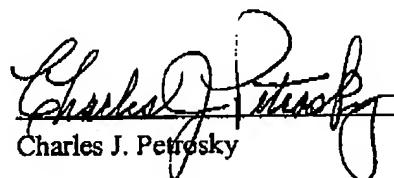
6. That, in my considered opinion, "Cselle '034 teaches a first positive helical portion and then a negative helical portion and Ebenoch et al. '740 teaches a first neutral flute portion (non-helical) and then a positive helical flute portion and then a neutral flute portion (non-helical).

7. That, in my considered opinion, it is not obvious to a person having ordinary skill in the art to include a drill in which a second helical flute portion that twists in a direction opposite of the first helical flute portion and the third helical flute portion twists in a direction opposite the second helical flute portion. Heretofore, it has been the accepted practice to design a flute of a drill to include a positive helical flute angle and/or a neutral flute (non-helical) and not three helical flute portions that twist in opposite directions.

8. That the undersigned declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issuing thereon.

3/31/2006

Date


Charles J. Petrosky